

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: METALUX

Report Number: P229450

Luminaire Tested: **24ALNG-LD5-80-UNV-L840-CD1-SVPD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P229450
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P36086)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24ALNG-LD5-80-UNV-L840-CD1-SVPD1-U
Description: METALUX 2X4 ARCLINE LED TROFFER WITH CURVED LENS AND SENSOR
Light Source: (252)4000K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7774.0 lumens
Efficiency: N/A
Efficacy: 119.2 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.24 / 1.33
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

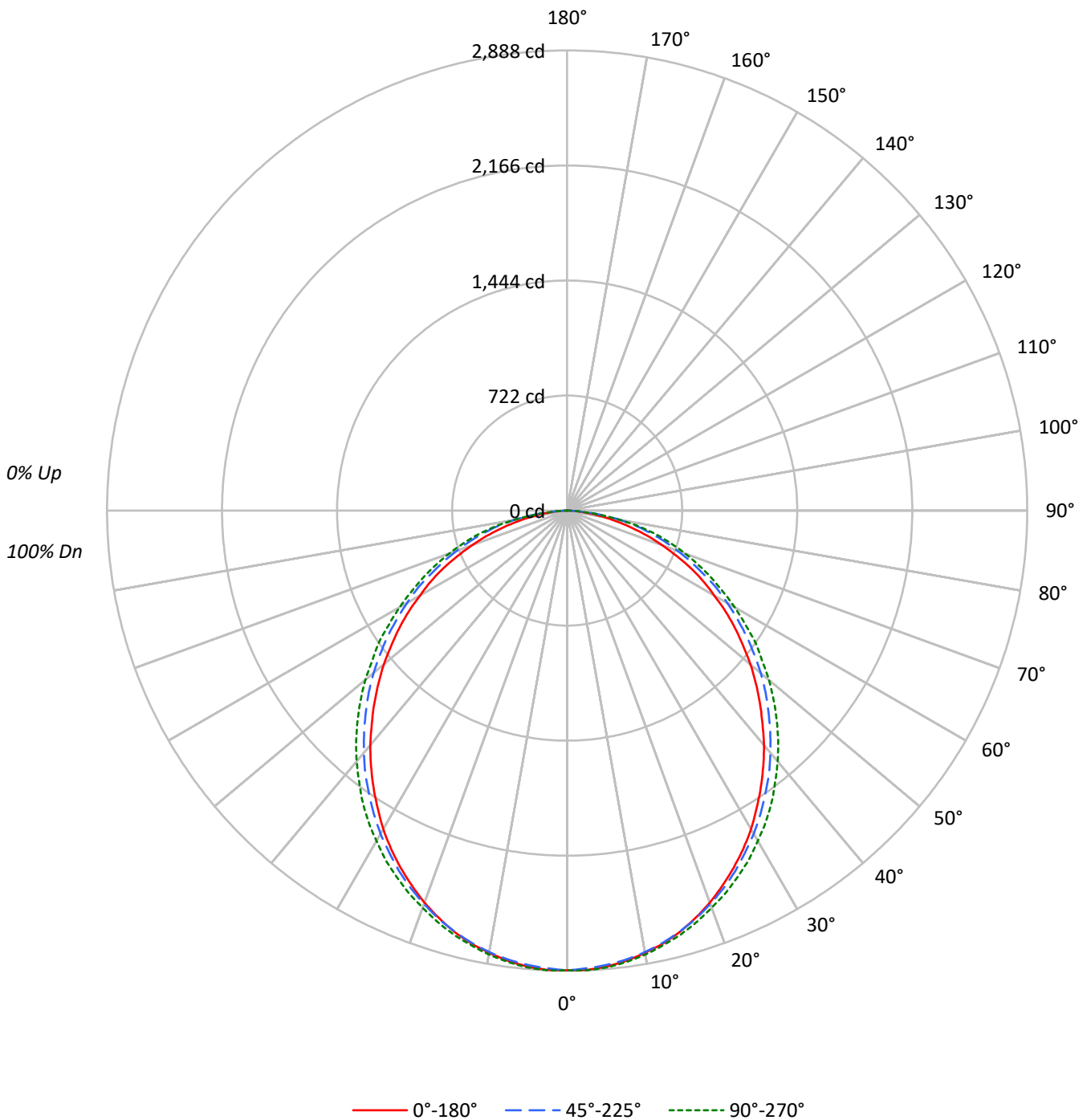
Input Watts (W): 65.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20	
RC	80				70				50				30				10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	109	104	100	96	106	102	98	94	98	94	91	94	91	89	90	88	86	84
2	99	91	84	78	96	89	83	77	85	80	75	82	78	74	79	75	72	70
3	90	80	72	65	88	78	71	64	75	69	63	72	67	62	70	65	61	59
4	83	71	62	55	80	69	61	55	67	60	54	65	58	53	62	57	53	50
5	76	63	54	48	74	62	54	47	60	53	47	58	51	46	56	50	46	44
6	70	57	48	42	68	56	48	41	54	47	41	53	46	41	51	45	40	38
7	65	52	43	37	63	51	43	37	49	42	36	48	41	36	47	40	36	34
8	61	47	39	33	59	47	38	33	45	38	33	44	37	32	43	37	32	30
9	57	43	35	30	55	43	35	30	42	34	29	41	34	29	40	34	29	27
10	53	40	32	27	52	40	32	27	39	32	27	38	31	27	37	31	26	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4420	4420	4420
5°	4417	4401	4425
10°	4384	4376	4400
15°	4340	4336	4368
20°	4269	4281	4323
25°	4179	4218	4283
30°	4083	4143	4233
35°	3963	4054	4183
40°	3843	3966	4109
45°	3708	3869	4030
50°	3578	3780	3939
55°	3435	3668	3853
60°	3266	3556	3721
65°	3111	3418	3622
70°	2846	3294	3523
75°	2487	3185	3428
80°	2080	2984	2961
85°	1441	2116	1891



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	272.4	3.5
10°-20°	772.8	9.9
20°-30°	1152.1	14.8
30°-40°	1360.1	17.5
40°-50°	1378.7	17.7
50°-60°	1222.7	15.7
60°-70°	927.4	11.9
70°-80°	549.3	7.1
80°-90°	138.5	1.8
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	2197.3	28.3
0°-40°	3557.4	45.8
0°-60°	6158.8	79.2
0°-90°	7774.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7774.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2886	2886	2886	2886	2886	
5°	2873	2870	2862	2873	2878	272
15°	2737	2737	2734	2747	2755	771
25°	2473	2478	2496	2527	2534	1139
35°	2119	2137	2168	2217	2237	1326
45°	1712	1735	1786	1840	1860	1321
55°	1286	1312	1374	1425	1443	1149
65°	858	884	943	984	999	846
75°	420	477	538	566	579	451
85°	82	123	120	110	108	105
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2885.5	2885.5	2885.5	2885.5	2885.5
2.5°	2885.5	2883.0	2875.3	2885.5	2888.1
5°	2872.7	2870.2	2862.5	2872.7	2877.9
7.5°	2849.7	2849.7	2842.0	2852.2	2857.4
10°	2818.9	2818.9	2813.8	2824.0	2829.2
12.5°	2783.0	2783.0	2777.9	2790.7	2793.3
15°	2736.9	2736.9	2734.3	2747.2	2754.8
17.5°	2680.5	2680.5	2685.7	2703.6	2706.2
20°	2619.0	2621.6	2626.7	2649.8	2652.3
22.5°	2547.3	2555.0	2565.2	2590.8	2598.5
25°	2473.0	2478.1	2496.0	2526.8	2534.5
27.5°	2393.5	2401.2	2419.1	2457.6	2470.4
30°	2308.9	2314.1	2342.3	2380.7	2393.5
32.5°	2214.1	2226.9	2257.7	2303.8	2319.2
35°	2119.3	2137.2	2168.0	2216.7	2237.2
37.5°	2021.9	2037.3	2080.9	2129.6	2144.9
40°	1922.0	1937.4	1983.5	2037.3	2055.2
42.5°	1814.4	1837.4	1886.1	1939.9	1960.4
45°	1711.8	1734.9	1786.2	1840.0	1860.5
47.5°	1606.8	1629.8	1688.8	1734.9	1758.0
50°	1501.7	1529.9	1586.3	1635.0	1652.9
52.5°	1391.5	1419.7	1478.6	1527.3	1540.2
55°	1286.4	1312.1	1373.6	1424.8	1442.8
57.5°	1178.8	1207.0	1265.9	1317.2	1322.3
60°	1066.1	1096.8	1160.9	1201.9	1214.7
62.5°	966.1	991.7	1060.9	1094.3	1101.9
65°	858.5	884.1	943.1	984.1	999.4
67.5°	743.2	779.0	840.5	881.6	891.8
70°	635.5	679.1	735.5	779.0	786.7
72.5°	527.9	574.0	638.1	674.0	681.7
75°	420.3	476.7	538.2	566.3	579.2
77.5°	325.5	379.3	440.8	466.4	463.8
80°	235.8	289.6	338.3	338.3	335.7
82.5°	151.2	205.0	230.6	223.0	217.8
85°	82.0	123.0	120.4	110.2	107.6
87.5°	33.3	41.0	30.8	23.1	17.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)